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MARKETING MARGINS FOR DAIRY PRODUCTS

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MARKETING MARGINS FOR DAIRY PRODUCTS 1/

Since 1952, the average marketing margin for a single quart of fluid milk has increased about 17 percent. However, the average marketing margin for all sales of fluid milk has increased less than for single quarts, owing to the shift toward larger sizes of containers and quantity discount plans. Operating costs have increased more than marketing margins. The net margin, before income taxes, has decreased by nearly one-third. The marketing margin for American processed cheese increased over 4 cents per pound from 1952 to 1953, but has held steady at about 29 cents for the last 5 years. After declining steadily for 5 years, the marketing margin for creamery butter rose 1-1/2 cents in the last year to a new high of 22.8 cents. For evaporated milk, the 1957 marketing margin of 8.2 cents per 14-1/2 ounce can was the highest on record.

Fluid Milk

The annual average retail price of milk reached a new high of 24.2 cents per single quart in 1957 (table 5). The advance of 0.9 cent from 1956 continues the steady increase of the past 3 years. The marketing margin was 13.3 cents, 0.6 cent above 1956; it has increased every year since 1950. The increase from 1950 to 1957 was 34 percent, an average of about 5 percent a year.

The farm value, or payment to the farmer, rose for the second consecutive year. The 1957 average of 10.9 cents was 1 cent above the 1950 level but 1 cent below the record in 1952. The farmer's share of the retail price averaged 45 percent, the same as in 1955 and 1956.

Retail Price Discounts and Producer Premiums

The retail prices used in calculating the marketing margins (table 5) are averages mainly of prices consumers paid for single-quart purchases of milk. But much fluid milk is sold in multiple-quart quantities at less than single-quart prices. Also, the farm value was calculated from averages of announced prices paid by processors to farmers and their cooperatives plus known marketwide premiums. Such prices do not include extra payments to farmers for bulk tank, quality, breed and location, and competitive premiums, hauling sudsidies and cooperative dividends. All of these extra payments are not paid in all markets or to all farmers; however, one or more of these payments probably is made to some farmers in most fluid milk markets.

1/ Prepared by D. D. MacPherson, Agricultural Economist, and H. V. Smith, Statistical Assistant, Market. Res. Div., Agr. Market. Serv.

Table 5.- Fluid milk: Retail price per quart in urban areas, farm value, marketing margin, and farmer's share of retail price, United States, average 1947-49, and annual 1950-57 1/

Year	Retail price	Farm value	Farmer's share	Marketing margin
	Cents	Cents	Percent	Cents
1947-49	20.1	10.6	53	9.5
1950	19.8	9.9	50	9.9
1951	22.1	11.2	51	10.9
1952	23.2	11.9	51	11.3
1953	22.8	11.1	49	11.7
1954	22.4	10.4	46	12.0
1955	22.5	10.2	45	12.3
1956	23.3	10.6	45	12.7
1957 2/	24.2	10.9	45	13.3

1/ Estimates of the retail price and farm value are computed from average retail and farm prices published by the Bur. of Labor Statistics and the Agr. Market. Serv.

2/ Preliminary.

Detailed studies are now being made of the farm-retail margin for fluid milk in a few individual markets. These studies consider the varying prices paid for milk purchased from home delivery routes and at stores in varying quantities and in different types of containers. They also consider all payments made to farmers.

Data gathered for the Chicago fluid milk market show that in May-June 1956 householders' purchases for home use in half-gallon and gallon containers, at an average price of 21.1 cents per quart, accounted for 78.3 percent of all purchases of fresh milk (table 6). Purchases in quart containers, at an average price of 23.2 cents per quart, accounted for the remaining 21.7 percent. (An earlier study showed that in 1934-35 sales in quart containers accounted for 33.4 percent of total sales. 2/) More than twice as much -- 68.2 percent of the total -- was purchased from stores at prices averaging 21.1 cents per quart as from home delivery routes, which accounted for 30.7 percent of the total at prices averaging 22.6 cents per quart (table 6). Prices paid ranged from a low of 15.8 cents per quart for a gallon purchased at a store to a high of 32 cents per quart for a single quart container purchased on a home delivery route.

For sales of raw milk made to distributors in the Chicago market, average net payments received by farmers, including extra payments of 9 cents per 100 pounds or 0.02 cent per quart, were equivalent to 8.8 cents per quart of milk sold to consumers.

2/ From H. C. Trelogan, "An Economic Analysis of the Chicago Milk Market," p. 10, unpublished Ph. D. Thesis, University of Minnesota, quoted in "Pre-War Developments in Milk Distribution," by L. F. Herrmann and William C. Weldon, Misc. Rpt. No. 62, Coop. Res. and Serv. Div., FCA, U. S. Dept. of Agr.

Table 6.- Household purchase of fresh whole milk: Average prices and proportion of purchases by source of purchase and size of container, Chicago, Illinois, May-June 1956

Source	Size of container	Percentage of quantity purchased: All sources	Percentage of quantity purchased: Specified sources	Average price: Per container	Average price: Per quart
		Percent	Percent	Cents	Cents
Home delivery	Quart	6.3	20.6	24.7	24.7
	Half gallon	13.4	43.5	46.1	23.1
	Gallon	11.0	35.9	82.8	20.7
Total		30.7	100.0	---	22.6
Store	Quart	15.4	22.5	22.5	22.5
	Half gallon	25.2	36.9	43.6	21.8
	Gallon	27.6	40.6	78.6	19.7
Total		68.2	100.0	---	21.1
Vending machine	Quart	1/	1/	20.0	20.0
	Half gallon	1.1	100.0	38.9	19.5
	Gallon	---	---	---	---
Total		1.1	100.0	---	19.5
All sources	Quart	21.7		23.2	23.2
	Half gallon	39.7		44.4	22.2
	Gallon	38.6		79.8	20.0
Total		100.0		---	21.5

1/ Less than 0.05 percent.

The average marketing margin was 12.7 cents, or 59 percent of the retail price. If extra payments to farmers had been omitted and the single-quart price used, the marketing margin would have been 14.6 cents, or 63 percent of the retail price.

Operating Costs of Fluid Milk Firms

Detailed data from 80 representative fluid milk distributors indicate that after 5 years of almost continuous increase, operating costs of the fluid milk industry leveled out last year. From 1952 through 1956, total operating costs increased 3 to 4 percent each year while the increase last year was less than 1 percent. The leveling out during the last year resulted from mixed changes in the major cost items. Personnel costs (constituting over half of the total operating costs) increased 2 percent from 1956 to 1957, facility costs (rent, repairs, and depreciation) were up 5 percent and operating supplies gained 4 percent, containers decreased 3 percent, and other operating expenses decreased 3 percent.

During the 5-year period 1952-56, the sales value of the dairy products processed from 100 pounds of milk and cream decreased 10 cents and costs of raw materials, mostly raw milk and cream, were down 53 cents, resulting in an increase of 43 cents in the gross margin (fig. 1). This was more than offset by a rise of 59 cents in total operating costs; consequently, the net margin (before income taxes) decreased 16 cents. In 1957, the net margin after income taxes was about 1-3/4 percent of sales value of products or, on an average, a little less than 1/2 cent per quart of milk.

Container Sizes and Types

During the last 2 years, significant shifts have occurred in proportion of sales of certain sizes of containers used by fluid milk distributors. Data for a respresentative group of 80 firms show that of the total weight of products sold, the proportion in gallon containers has increased slightly, and that in half-gallon containers has increased from about 28 to 33 percent (table 7). Nearly all the increased sales

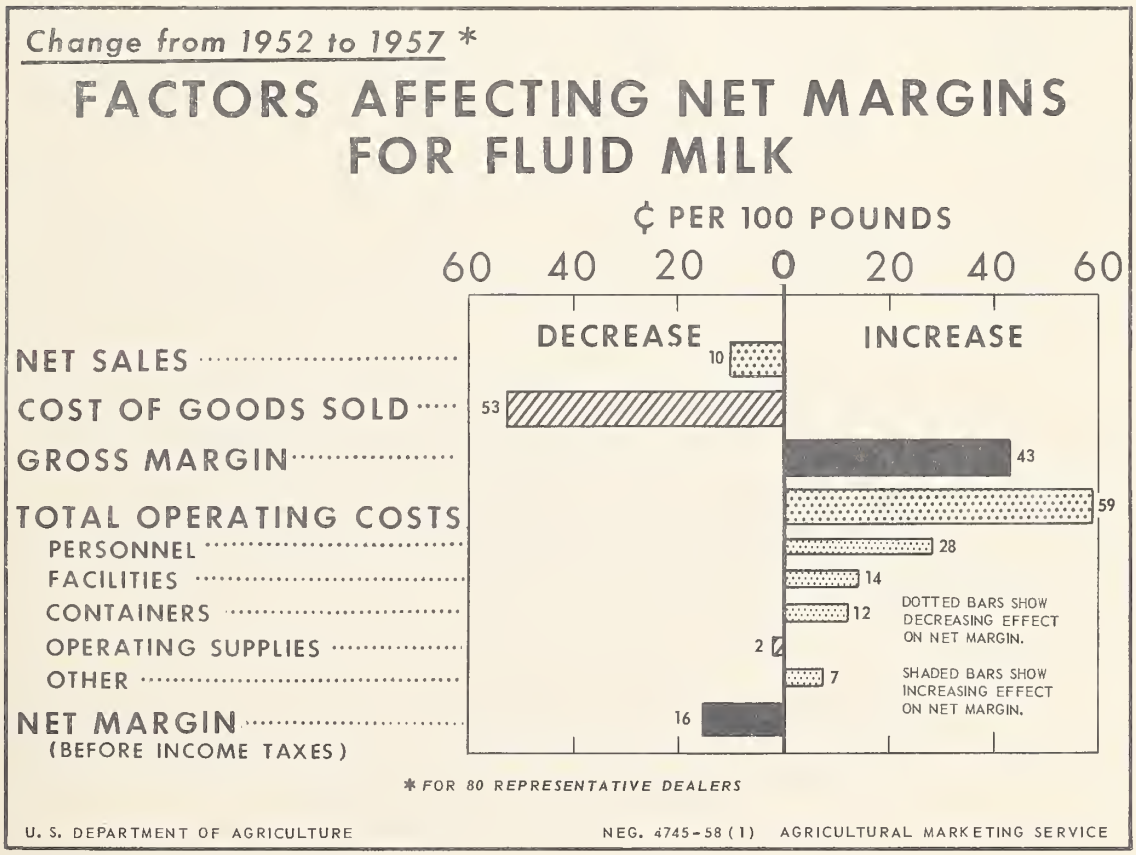

Figure 1

in half gallons was in paper containers. Quart containers are of less importance. They dropped from 51 to 38 percent during this 2-year period. This decrease was divided about equally between paper and glass containers. The percentage of product sold in half-pint containers has remained about the same, allowing for seasonal variations. Its seasonal use indicates the importance of the School Lunch and Special Milk programs, through which 3.5 billion half pints of milk were distributed during 1957. 3/

Table 7.- Proportion of total product sales by size of container, 80 milk dealers, July 1955-June 1957 1/

Year and quarter	5 gallon	Gallon	Half gallon	Quart	Half pint	Other 2/
	Percent	Percent	Percent	Percent	Percent	Percent
1955						
July-Sept.	6.5	1.4	27.6	51.2	7.5	5.8
Oct.-Dec.	6.9	1.6	28.3	47.5	10.1	5.6
1956						
Jan.-Mar.	7.5	1.6	28.8	46.6	10.5	5.0
Apr.-June	7.5	2.2	29.5	45.8	8.8	6.2
July-Sept.	8.1	1.6	32.2	45.2	6.7	6.2
Oct.-Dec.	11.0	1.4	30.6	42.2	9.4	5.4
1957						
Jan.-Mar.	10.9	2.1	31.5	39.5	10.6	5.4
Apr.-June	12.5	2.0	33.4	38.2	7.8	6.1

1/ Proportions computed on basis of total weight of products sold.
2/ Includes bulk gallons, 3-gallon dispenser, and manufactured products in packages.

In the second quarter of 1957, about 53 percent of the total weight of milk products was packaged in paper cartons, a slight gain from 1955. The proportion packaged in glass bottles declined from 40 percent to 32 percent. Sales in dispenser cans and bulk, combined, increased from 8 percent to over 14 percent. The 5-gallon dispenser can rose from 6.5 percent to 12.5 percent during the 2-year period. Apparently the dispenser machine is replacing other containers in hotels, restaurants, and institutions.

Sales Outlets

From a study of the operations of 80 typical fluid milk distributors, it appears that the shift in sales from retail (home delivery) to wholesale (stores, restaurants, and institutions) has slowed or halted. Retail

3/ Data about sales by milk distributors include all channels through which they dispose of milk. These data are to be distinguished from household purchases such as those for Chicago shown in table 6. Nationwide data on household purchases are being reported currently in "Household Purchases of Fluid Milk, Nonfat Dry Milk, Butter, and Margarine," (AMS-HPD Series) issued monthly by the AMS.

sales have remained near 37 percent of total sales for the last 2 years (table 8); they had decreased rapidly during the years immediately preceding 1955. Wholesale sales have declined from 53.4 percent in July-September 1955 to 50.8 percent in April-June 1957, while platform sales and sales to other dealers have increased from 9.5 percent to 13.2 percent during the same period. These changes indicate an increase in the importance of vendors (firms which distribute but do not process milk) and subdealers.

Table 8.- Milk processors' sales of fluid milk by type of sale, July-September 1955 - April-June 1957

Year and quarter	Retail sales 1/	Wholesale sales 2/	Platform and other dealers 3/	Total
	Percent	Percent	Percent	Percent
1955				
July-Sept.	37.1	53.4	9.5	100.0
Oct.-Dec.	37.4	52.6	10.0	100.0
1956				
Jan.-Mar.	36.4	52.7	10.9	100.0
Apr.-June	39.0	49.6	11.4	100.0
July-Sept.	37.7	51.3	11.0	100.0
Oct.-Dec.	37.5	50.7	11.8	100.0
1957				
Jan.-Mar.	36.8	50.6	12.6	100.0
Apr.-June	36.0	50.8	13.2	100.0

1/ Home delivery.
2/ Stores, restaurants, institutions, and other.
3/ Sales at platform, to other dealers, and in bulk.

Compiled from reports of 80 selected milk dealers.

In retail operations, half-gallon containers have increased from about 22 percent to nearly 30 percent of sales, while quarts have declined from about 74 percent to about 65 percent. In wholesale operations, sales in bulk dispenser cans have increased from nearly 15 percent to 23 percent of total sales; half-gallons have increased from about 30 percent to over 35 percent, while quarts have declined from 37 percent to 23 percent on the same basis. In platform sales and sales to other dealers, bulk dispenser cans and half-gallon containers increased in importance while quarts declined.

Manufactured Dairy Products

American Processed Cheese

The yearly average United States retail price of a pound of American processed cheese has varied by only 0.4 cent since 1954 and in 1957 was 57.6 cents. The yearly average wholesale price has varied by only 0.2

cent since 1954. Farm value -- what the farmer received for the milk equivalent -- during this period increased from 27.7 cents to 28.8 cents. But this rise was offset by a decline in the farm-wholesale margin from 8.8 cents to 7.7 cents. The total marketing margin decreased from 52 percent of the retail price in 1954 to 51 percent in 1955 and to 50 percent in 1956 and 1957. 4/

A study made in Wisconsin indicates that the marketing margin varies substantially for different varieties and styles of processed cheese and for different marketing channels. Retail prices ranged from 49 cents per pound for 2-pound and 5-pound loaves in supermarkets to 75 cents per pound cut to order from a loaf in specialty food stores. Prepackaged, sliced process cheese retailed at an average of about 62 cents per pound. Farm value and marketing margin each averaged about 30 cents per pound. While the marketing margin averaged about 50 percent of the retail price, it ranged from 39 percent to 59 percent.

A similar study for American cheddar cheese made in the Southeast also shows widely varying marketing margins. Retail prices for various packages and quantities, in different retail outlets, ranged from a low of 39 cents per pound to a high of 69 cents per pound. The farm value, which averaged about 5 cents lower than in Wisconsin, ranged from 24 to 27 cents. As a percentage of retail price, marketing margins were as low as 33 percent and as high as 62 percent.

Butter

Marketing margins for butter tend to be very stable. As a result of the relatively fixed marketing margin, retail prices and farm value tend to increase or decrease by the same amounts at the same time. The farm-retail price spread increased from 22.4 cents per pound in 1952 to a high of 22.8 cents in 1957 with a low of 21.1 in 1956. During this period, an increase in the wholesale-retail margin from 12.8 cents to 14.6 cents was mostly offset by a decrease in the farm-wholesale margin from 9.6 cents to 8.1 cents. The increase of 1.7 cents in the marketing margin from 1956 to 1957 was the largest year-to-year change in the last 8 years. The relatively stable marketing margin has, as a percentage of retail price, increased with lower retail and farm prices and decreased with higher prices; during the last 4 years, with relatively stable retail prices, it varied from 29 percent in 1956, 30 percent in 1954, and 31 percent in 1955 and 1957.

Evaporated Milk

The retail price of evaporated milk increased to 14.6 cents per 14-1/2 ounce can in 1957 but was still below the levels of 1952. The increase of 0.6 cent last year accompanied increases of 0.1 cent in farm value, 0.3 cent in farm-wholesale price spread, and 0.1 in wholesale-retail price spread. Marketing margin, as a percentage of retail price, was 57 percent in 1957, the same as 1954, and 1 percentage point more than in 1955 and 1956.

4/ Data for 1950-56 are given in "Farm-Retail Spreads for Food Products," U. S. Dept. of Agr. Misc. Pub. 741, Nov. 1957, p. 28. The same source shows similar data for butter and evaporated milk.